

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the Application.

1. (Previously amended) A method of determining a search window for processing signals in a wireless communications system, the method comprising:
 - determining a distance between at least one mobile terminal and a base station based on their respective locations;
 - estimating a nominal PN offset of signals transmitted between the base station and the at least one mobile terminal based on the distance between the at least one mobile terminal and the base station; and
 - determining a search window used for processing received signals based on the estimate of the nominal PN offset.
2. (Previously amended) A method as defined in Claim 1, wherein estimating the nominal PN offset and determining the search window are performed in the base station.
3. (Original) A method as defined in Claim 2, wherein the estimated nominal PN offset is transmitted from the base station to the at least one mobile terminal.
4. (Original) A method as defined in Claim 2, wherein the search window is transmitted from the base station to the at least one mobile terminal.
5. (Previously amended) A method as defined in Claim 1, wherein estimating the nominal PN offset and determining the search window are performed in the at least one mobile terminal.
6. (Previously amended) A method as defined in Claim 5, wherein the received signals comprise signals received at the at least one mobile terminal and include a pilot signal.
7. (Original) A method as defined in Claim 6, wherein the pilot signal is encoded with a pseudorandom code.
8. (Original) The method as defined in Claim 7, wherein different base station pilot signals are distinguished by their unique PN offsets.
9. (Currently Amended) A mobile terminal comprising:
 - a receiver configured to receive a communication signal from a base station;

a controller configured to estimate a nominal PN offset of the received communication signals based on a distance between the mobile terminal and the base station, and to determine a search window ~~in response to the distance between the mobile terminal and the base station~~ to be used for processing received signals based on the estimate of the nominal PN offset; and

a search engine configured to accept the search window and to perform a search of the received communication signal using the search window.

10. (Original) A mobile terminal as defined in Claim 9, wherein the received communication signal comprises a pilot signal.

11. (Currently Amended) A mobile terminal comprising:

a receiver configured to receive communication signals from a base station;

a location engine configured to accept navigational information and to thereby determine location of the mobile terminal;

a controller configured to estimate a nominal PN offset of the received communication signals based on a distance between the mobile terminal and the base station based on the location of the mobile terminal, and to determine a search window ~~in response to the distance from between the mobile terminal and the base station~~ to be used for processing received signals based on the estimate of the nominal PN offset; and

a search engine configured to accept the search window and to perform a search of the received communication signal using the search window.

Claims 12-14. (Cancelled)

15. (Currently Amended) A base station comprising:

a receiver configured to receive communication signals from a mobile terminal;

a controller configured to estimate a nominal PN offset of the received communication signals based on a distance between the mobile terminal and the base station, and to determine a search window ~~in response to the distance from between the mobile terminal and the base station~~ to be used for processing received signals based on the estimate of the nominal PN offset; and

a search engine configured to accept the search window and to perform a search of the received communication signal using the search window.

16. (Original) A base station as defined in Claim 15, wherein the nominal PN offset is transmitted from the base station to at least one mobile terminal.

17. (Original) A base station as defined in Claim 15, wherein the search window is transmitted from the base station to at least one mobile terminal.

18. (Currently Amended) A base station comprising:

a receiver configured to receive communication signals from a mobile terminal;

a location engine configured to accept navigational information and thereby determine a location of the mobile terminal;

a controller configured to estimate a nominal PN offset of the received communication signals based on a distance between the mobile terminal and the base station based on the location of the mobile terminal, and to determine a search window ~~in response to the distance from between the mobile terminal and the base station to be used for processing received signals based on the estimate of the nominal PN offset;~~ and

a search engine configured to accept the search window and to perform a search of the received communication signal using the search window.

19. (Original) A base station as defined in Claim 18, wherein the nominal PN offset is transmitted from the base station to the mobile terminal.

20. (Original) A base station as defined in Claim 18, wherein the search window is transmitted from the base station to the mobile terminal.

Claims 21-26. (Cancelled)

27. (New) A communications system comprising:

means for determining a distance between at least one mobile terminal and a base station based on their respective locations;

means for estimating a nominal PN offset of signals transmitted between the base station and the at least one mobile terminal based on the distance between the at least one mobile terminal and the base station; and

means for determining a search window used for processing received signals based on the estimate of the nominal PN offset.

28. (New) A system as defined in Claim 27, wherein the means for estimating the nominal PN offset and means for determining the search window are included in the base station.